this proposition. Bell Atlantic alone cites a single "study," performed by a company called Keynote Systems, with support from <u>Boardwatch</u> magazine, claiming that the average backbone speed is 40 kbps. <sup>122</sup> No other record support is provided. Bell Atlantic does not even bother to attach a copy of the study. Without the actual words of the study in the record, Bell Atlantic's characterization of the study and its results is misleading.

After obtaining and reviewing on its own Keynote's public statements about the study, WorldCom has considerable doubts about its claimed findings. First, the study was conducted in May and June 1997, and again in August and September 1997. This particular period is widely considered to be the height of public concerns about supposed network congestion. Any review of traffic patterns from this particular period is likely to be skewed.

Second, Keynote may not qualify as a disinterested analyst. Keynote's web site indicates that it is in the business of selling diagnostic services to backbone providers. Certainly it is in Keynote's own financial interest to "discover" and then publicize major problems with the backbone.

Third, despite Bell Atlantic's claims, Keynote's study does <u>not</u> conclude that Internet backbone congestion is the cause of the purported average speed of 40 kbps. In fact, Keynote indicates in several places that more than one culprit is responsible. For example, in one press release, Keynote states that some of the congestion centers on the Network Access Points (NAPs") where backbone providers interconnect their networks.<sup>123</sup> In another statement

<sup>122</sup> Bell Atlantic Petition at 22.

Keynote/Boardwatch Internet Backbone Index, "Frequently Asked Questions," at 5. If the NAPs are in fact a major part of the "problem" -- which WorldCom does not concede -- there is no law or regulation that prevents the RBOCs from building as many NAPs as

cited by Bell Atlantic, Keynote pins partial blame on the Domain Name Service ("DNS") at the user's end. 124 In yet another press release, Keynote claims that "the major performance slowdowns occur in the Internet infrastructure, primarily at the on-ramps, off-ramps and interconnection, or switching points between Internet providers where congestion and packet loss frequently occur. 125 Keynote cites the need for seven types of action to relieve congestion: (1) creating intelligent caching of content; (2) duplicating popular web sites; (3) using IP multicasting; (4) increasing private peering interconnection; (5) making more efficient use of public peering; (6) using better web site design; and (7) deploying more advanced web servers and browsers. 126 Most of these prescriptions are aimed at web sites and ISPs, and none can be fairly described as problems intrinsic to any perceived limitations of the Internet backbones themselves. 127

they want. In fact, Ameritech and Pacific Bell already are operating NAPs within their regions. See Ameritech Petition at 30. Likewise, the RBOCs can build as many regional, intraLATA backbone links as they would like. And ISPs can agree to peer and exchange traffic at numerous private interconnection points.

Bell Atlantic White Paper at 22; <u>see</u> Keynote Systems, "Top 10 Discoveries About the Internet," http://www.keynote.com/measures/top10.html.

Press Release, Keynote Systems, "DSL and Cable Modems Will Not Solve Internet Performance Problems According to Keynote Systems," February 13 1998, at 1.

<sup>126 &</sup>lt;u>Id</u>. at 1-2.

The further enhancement of peering options is already being addressed in the marketplace. As one example, a consortium of companies has created the concept of Brokered Private Peering ("BPP"), a new hybrid model for exchanging Internet traffic that combines the use of shared facilities (like public NAPs) and stringent peering rules (like private peering arrangements). A BPP Group plans to deploy six ATM-based peering points around the nation this summer to facilitate this new, highly efficient means of exchanging Internet traffic between networks. See "Brokering Reliability," InternetWeek, March 30, 1998, at 1.

Further, Keynote claims that "Internet performance problems can be solved" by the service provider and end user, <sup>128</sup> an assertion that could not be true if it were strictly a backbone congestion problem. In fact, several ISPs apparently used the study's results, and diagnostic tools provided by Keynote, to substantially improve the response times on the networks they use. <sup>129</sup> Plainly, then, the study's results are not written in stone.

Finally, the very Keynote study upon which Bell Atlantic places so much reliance has been superseded by an updated version. In a press release dated March 11, 1998, Keynote announces that overall Internet performance now is 60 percent <u>faster</u> in the first two months of 1998 than the comparable period of 1997. Keynote indicated that this "dramatic improvement" took place <u>despite</u> network outages caused by GTE and other providers, as well as congestion at selected commercial web sites. As with the original study, WorldCom is not entirely convinced of the accuracy of the latest study results. Nonetheless, if Bell Atlantic was so willing to stand behind the results of the original Keynote study, it has little choice but to publicly embrace the new and improved study results as well.

WorldCom also is troubled by the fact that Bell Atlantic's marketing department apparently does not believe the factual claims of its regulatory department. In prominent advertising repeated in <u>The Washington Post</u> throughout March 1998 -- over one month after

Press Release, "Keynote Systems Clocks True Speed on the Internet Highway At 5,000 Characters Per Second, or Only 40 Kbps," October 21, 1997, at 2.

<sup>&</sup>lt;sup>129</sup> <u>Id</u>.

Press Release, "Internet Performance 60% Faster This Year Than 1997 -- Keynote Systems Announces Internet Performance Results for January and February," March 11, 1998, at 1.

<sup>&</sup>lt;sup>131</sup> <u>Id</u>.

filing its Section 706 petition -- Bell Atlantic urges consumers to purchase its ISDN service. These advertisements all state that "if you have a Bell Atlantic residential ISDN line, you can download data, image, voice and video at up to 128 Kbps," or "four times faster than a 28.8 Kbps modem." However, the fine print at the bottom of the advertisements fails to include a disclaimer to inform consumers that, in Bell Atlantic's own estimation, such speeds can never actually be achieved because the Internet typically operates only at 40 kbps. Either Bell Atlantic is being disingenuous with its own customers, or disingenuous with the U.S. government. WorldCom challenges Bell Atlantic to tell us which scenario is true.

WorldCom believes that any congestion problems that might have existed, or may still exist, on the Internet backbone are the result of unprecedented and unpredictable growth. It is no secret that usage of the Internet has exploded over the past several years, and that providers of Internet services have labored hard to maintain their pace. WorldCom's own UUNet subsidiary alone has spent hundreds of millions of dollars to increase the capacity of its backbone, as Bell Atlantic itself admits. 133

It is interesting that Bell Atlantic apparently shares WorldCom's view that no one
-- not even Bell Atlantic -- could have predicted the massive increase in use of the Internet. In
their joint comments in the <u>Internet NOI</u> proceeding, Bell Atlantic and NYNEX stated:

Virtually no one in industry, government, or the consumer community foresaw the explosive growth in Internet traffic. Without a reasonable expectation that historical growth patterns would be dramatically altered, it would have been

<sup>132</sup> See Attachment A.

Bell Atlantic White Paper at 21 n.46; 42.

irresponsible for Bell Atlantic and NYNEX to have invested in vast amounts of new plant. 134

WorldCom generally agrees with the proposition that it would be irresponsible for any carrier to invest in new plant without the reasonable expectation of customer demand to support it. The same lesson should apply to Internet backbone providers as well. Certainly if Bell Atlantic was able to plead the benefit of the doubt last year, WorldCom and other providers of Internet backbone should receive no less benefit this year. Bell Atlantic should not decry this temporary transition stage that it otherwise appears to understand so well.

## D. Bell Atlantic's Arguments About MCI And WorldCom's "Aggregation Of Backbone Power" Are Redundant And Irrelevant And Should Be Ignored

Not only are the RBOCs' arguments about congestion of the Internet backbone incorrect and irrelevant, but Bell Atlantic's numerous disparaging references to WorldCom and UUNet, and its allegations about WorldCom and MCI "dominating" and "controlling" the Internet, are without merit as well. WorldCom has already addressed these arguments several times in CC Docket No. 97-211, and will not repeat those discussions here. Bell Atlantic's doomsday predictions and gratuitous potshots -- a bit unseemly when coming from a confirmed monopolist -- amount to nothing more than a blatant attempt by Bell Atlantic to extend the comment period of that proceeding. Only a few key points in response need be reiterated, however:

<sup>&</sup>lt;sup>134</sup> BA/NYNEX 96-263 Comments at 7; see also BA/NYNEX 96-263 Reply at 7 ("Because Internet traffic differs significantly from historical trends, it is almost impossible to forecast with any accuracy.").

<sup>&</sup>lt;sup>135</sup> Bell Atlantic White Paper at 27-43. See also Ameritech Petition at 9-10.

- o the Internet backbone is not a physical thing that an entity can "control," but rather an interconnected assemblage of owned routers and leased fiber, nothing more. 136
- o the provision of backbone capacity is competitive, with numerous current and new providers. 137
- o backbone is backbone; it does not have a residential or business flavor, and it cannot "offer" services to one type of customer or another, as Bell Atlantic claims. <sup>138</sup> The backbone only supports ISP traffic flows indiscriminately.
- backbone nodes obviously are placed more prominently to support where the traffic is: mostly in large urban areas. This is only prudent network design. As discussed above, it appears that Bell Atlantic would agree that carriers must prioritize by first putting their switches where they are most needed. The RBOCs are free to install NAPs and regional networks wherever they want to help improve interconnection in certain areas within their regions.
- o any concerns about dominance of the Internet should focus on the ILECs' local transmission facilities. Those facilities, including local loops, are an integral part of the Internet because, at least for now, they form the only viable entrance ramp to the Internet for the vast majority of average consumers.

Bell Atlantic's petition does not respond to any of these points.

### E. <u>US WEST's Assertions About Its Rural Region Are Beside The Point</u>

US WEST argues essentially that (1) the rural communities in its region have not yet received the same adequate backbone capacity and digital access services as other regions, (2) as the incumbent, US WEST is in the best position to provide these facilities, networks, and services, and (3) the Commission therefore should remove restrictions that hinder US WEST's

<sup>&</sup>lt;sup>136</sup> WorldCom/MCI Reply at 71-21.

<sup>&</sup>lt;sup>137</sup> WorldCom/MCI Reply at 74; see Part B above.

<sup>&</sup>lt;sup>138</sup> Bell Atlantic Petition, White Paper at 37.

deployment capability.<sup>139</sup> Many interrelated aspects of these arguments have been addressed above, but a few additional points follow.

First, WorldCom does not dispute that some regions of the country are ahead of others in terms of the data services and facilities that are available to consumers. It does not logically follow, however, that the only steps the Commission should take is to relieve US WEST of its statutory obligations. US WEST, like the other RBOCs, is asking the Commission to second-guess the workings of the competitive market. This is contrary to the dictates of Section 230 of the Act, which compels the Commission to refrain from taking any regulatory action concerning the competitive data services markets.

In addition, US WEST has failed to meet the requirements of Section 706 by documenting that deployment of advanced data services is not occurring on a "reasonable and timely basis." Section 706 establishes a two-step process: first the factual inquiry, and then FCC action (if any). Aside from a few maps and references to the Keynote study, however, US WEST offers no compelling and irrefutable proof of imminent market failure.

Further, US WEST's focus is far too narrow. In WorldCom's estimation, the lack of any significant local competition within the US WEST region is the far larger crime. Rather than forsaking its monopoly by treating competitors as valuable wholesale customers who also sell local service, US WEST wants the Commission to assist it in extending its monopoly to other services. WorldCom believes that whatever standard US WEST claims should be adopted should apply equally to US WEST's local operations.

<sup>&</sup>lt;sup>139</sup> US WEST Petition at 8-26; 6-8; 26-36.

Finally, like the other RBOCs, US WEST already possesses the vehicle for the relief it seeks: open its markets to local competition, and thereby comply with Section 271. It is as simple as that.

### VII. THE RBOCS' PETITIONS REPRESENT JUST ANOTHER ELEMENT IN A BROADER EFFORT TO GUT THE 1996 ACT

For the many reasons above, there is no good legal, policy, or factual reason for the Commission to radically deregulate the RBOCs. Nonetheless, the RBOCs apparently are not satisfied to have their petitions judged solely on their dubious merits. Instead, the RBOCs have enlisted other affiliated groups to employ arguments about Section 706 and the deployment of advanced data services as a pretext to further the RBOCs' own ends.

Comments are due next week on a petition filed by the Alliance for Public Technology ("APT") on February 18 requesting that the Commission issue an NOI and NPRM to implement Section 706. 140. For purposes of these consolidated comments, however, it must be noted that APT is not the unaffiliated "public interest" group that it appears to be. A recent APT newsletter states that APT derives its financial support from membership dues, publications, and contributions from "Sponsors" and "Affiliates." Membership in APT is open to all nonprofit organizations and individuals, but only those "not members of the affected industries." Thus, membership by telecommunications companies is not allowed. APT lists its sole sponsors as Bell Atlantic, Pacific Bell, and the United States Telephone Association

<sup>&</sup>lt;sup>140</sup> Petition of the Alliance for Public Technology, CCB/CPD 98-15, filed February 18, 1998 ("APT Petition").

<sup>&</sup>lt;sup>141</sup> APT News, February 1998, at 8.

("USTA"), while its affiliates include Ameritech, BellSouth, GTE, SBC, and US WEST. 142

The APT petition cleverly uses the cry for universal service as a superficially attractive cloak to mask its pro-ILEC bias. Specifically, APT asserts that the Commission should apply Section 251(c) only to the existing ILEC network, that Section 251(c)(3) (the UNE provision) should be phased out, and that Section 251(c) should sunset altogether. APT also advocates eliminating depreciation regulation, allowing ILECs to recover "stranded" costs, imposing some form of access charges on ESPs, and encouraging pricing flexibility and retail price deregulation. Obviously the ILECs' affiliation and sponsorship fees in APT have been well spent.

Other ILEC-sponsored proposals are sure to follow. For example, the "Digital Broadband Working Group" was convened in September 1997 at the request of the Progress and Freedom Foundation. Co-headed by Solomon Trujillo, President and CEO of US West, this Working Group was asked by the Foundation to "examine ways [to] advance investment in and deployment of digital broadband communications networks." As a result, the Working Group put together two white papers on current information about the demand and supply of broadband networks. However, it appears that the Working Group now is using the ostensibly non-controversial facts it has gathered about the Internet to front an openly political agenda to free the ILECs of legal restrictions. In recent correspondence that has come into WorldCom's possession, the Foundation's President indicates that the fact-gathering work to date:

<sup>&</sup>lt;sup>142</sup> <u>Id</u>.

<sup>&</sup>lt;sup>143</sup> APT Petition at 15-21.

<sup>&</sup>lt;sup>144</sup> APT Petition at 22-28.

has laid the substantive groundwork for a dramatic -- but eminently "do-able" -- proposal to protect digital broadband networks from unnecessary Federal, state or local regulation, while promoting a competitive market open to both new entrants and incumbents.<sup>145</sup>

By "creating" a distinction between packet-switched technologies and circuit-switched technologies, he writes, the former would be "essentially exempt from price regulation." In addition, "competitive access to existing networks can be assured under existing law, without the need to impose new regulatory burdens." The Foundation memo also outlines a major conference and a public policy forum on "solving the bandwidth crisis." A third Foundation draft white paper, just released for review, takes on the "regulatory impediments to broadband investment" by the ILECs, focusing on rate regulation, unbundling and resale rules, and the interLATA restriction. Again, the script sounds strangely familiar.

WorldCom does not call attention to the APT and Foundation papers to take issue in any way with the right of private parties to communicate their positions in public policy debates. The only point is that the Commission to date has only seen the tip of the iceberg on this issue, and the RBOCs and their allies will be sure to find many creative ways -- overtly or otherwise -- to telegraph their views in the coming months. A quick and firm denial of the three

Memorandum from Jeffrey A. Eisenach, President, Progress & Freedom Foundation, to Lewis Platt and Sol Trujillo, "Next Steps for the Digital Broadband Working Group," dated February 1, 1998, at 1.

<sup>&</sup>lt;sup>146</sup> <u>Id</u>. As indicated above, the fundamental premise behind this filing is plain wrong. For regulatory purposes, there is no clear dichotomy between circuit-switched and packet-switched networks; the latter is merely a far more efficient version of the former. The only serviceable distinction is between the services being provided.

Progress and Freedom Foundation, Digital Broadband Working Group, White Paper #3 (Preliminary Draft), "Regulatory Impediments to Broadband Investment," March 1998.

RBOC petitions would save the Commission and interested parties a considerable amount of time and energy better spent on actually implementing the Telecommunications Act.

### VIII. CONCLUSION

The Commission should promptly dismiss the unsupported "Trojan horse" petitions filed by Bell Atlantic, US WEST, and Ameritech. The relief sought in these petitions would directly violate existing law and regulations, and undermine local competition policies.

Respectfully submitted,

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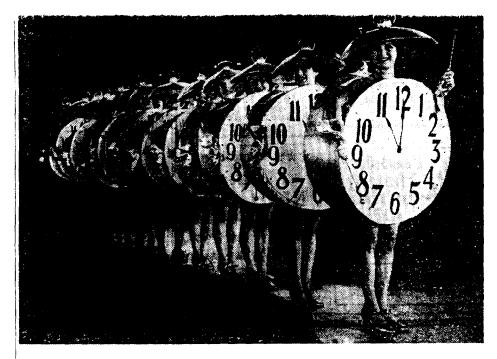
Suite 400

Washington, D.C. 20036

(202) 776-1550

April 6, 1998

### **ATTACHMENT A**



# My, my, how the hours seem to stand still when you're downloading without ISDN.

Bring ISDN home now. Spend less and spend less time waiting.

Remember when you were a kid and someone asked, "How long is eternity?" Eternity is how long you sit in front of your computer when you download a big data or graphics file without ISDN.

And the waiting can drive you crazy.

If you have a Bell Atlantic residential



ISDN line, you can download data, image, voice and video at up to 128 Kbps. That's four

times faster than a 28.8 Kbps modem. Plus you can surf the 'Net at 64 Kbps while you make a call or send a fax.

Now you can get connected to a Bell Atlantic ISDN line for only \$10. That's a savings of \$115. Offer ends March 31, 1998.

### Big savings on an ISDN modem.

Get the ZyXEL\* OMNLNET ISDN modem for only \$159.95 (regularly priced at \$299). *PC World\** called it a best buy. This offer ends April 30, 1998.

To order or for more information, call Bell Atlantic InfoSpeed at 1 800 409-2515, press 136. Call today. Because these offers end soon. And the clock is ticking.

CALL 1 800 409-2515 (Press 136)



Offer available to Bell Atlantic residential customers in Maryland, Washington, D.C. and Virginia who reside within standard ISDN service distance from central office. A \$10 connection charge will appear on your separate Bell Atlantic residential ISDN bill (normal charge is \$125). Installation of inside wiring and ISDN-related equipment are additional cost items. Monthly ISDN charges and usage fees apply. ISDN is not available in all areas. Data rate of 128 Kbps requires use of both B channels. ISDN modem offer does not require the purchase of Bell Atlantic ISDN service. ZyXFL is a registered trademark of ZyXFL Corporation. \*August 1997. © Bell Atlantic 1998.





# Did someone get a little frustrated waiting for that big bad file to download?

# Bring ISDN home. Download faster and spend a lot less time waiting.

It's enough to make a grown man (or woman) cry. The endless, mind-numbing waste of time you have to endure whenever you try to download a big data or graphics file.

Of course, if you have a Bell Atlantic residential ISDN line, you can download data, image, voice and video at up to 128 Kbps. That's four times faster than a 28.8 Kbps modem. Plus you can surf the 'Net at 64 Kbps while you're on the phone or sending a fax.

Time isn't the only thing you'll save if you get a residential ISDN line. Because if you call and order now you can get connected to ISDN for only \$10. That's a

savings of \$115.

And think of the things you can do with \$115.



So don't wait. Getting ISDN is easy.

To order or for more information, call 1 800 409-2515, press 135.

Better call today. Because this offer ends March 31, 1998.

And it would be a crying shame if you missed it.

CALL 1 800 409-2515 (Press 135)



Offer available to Bell Atlantic residential customers in Maryland, Washington, D.C. and Virginia who reside within standard ISDN service distance from central office. A \$10 connection charge will appear on your separate Bell Atlantic residential ISDN bill (normal charge is \$125). Installation of inside wiring and ISDN-related equipment are additional cost items. Monthly ISDN charges and usage fees apply. ISDN is not available in all areas. Data rate of 128 Kbps requires use of both B channels.

#### **CERTIFICATE OF SERVICE**

I, Cecelia Y. Johnson, hereby certify that I have this 6th day of April, 1998, sent a copy of the foregoing "Consolidated Opposition of WorldCom, Inc." in CC Docket Nos. 98-11, 98-26, and 98-32, by hand delivery, to the following:

Magalie Roman Salas (one original and twelve copies per docket) Secretary Federal Communications Commission 1919 M Street, N.W. Room 222 Washington, D.C. 20554

The Honorable William E. Kennard Chairman Federal Communications Commission 1919 M Street, N.W. Room 814 Washington, D.C. 20554

The Honorable Susan P. Ness Federal Communications Commission 1919 M Street, N.W. Room 832 Washington, D.C. 20554

The Honorable Harold W. Furchgott-Roth Federal Communications Commission 1919 M Street, N.W. Room 802 Washington, D.C. 20554

The Honorable Michael K. Powell Federal Communications Commission 1919 M Street, N.W. Room 844 Washington, D.C. 20554

The Honorable Gloria Tristani Federal Communications Commission 1919 M Street, N.W. Room 826 Washington, D.C. 20554 A. Richard Metzger, Jr. Chief, Common Carrier Bureau Federal Communications Commission 1919 M Street, N.W. Room 500 Washington, D.C. 20554

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